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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------|
| 10/696,440 | 10/28/2003 | June Ho Park | 10125/4124 | 6766 |
| 7590 03/09/2007 Brinks Hofer Gilson & Lione Post Office Box 10395 Chicago, IL 60610 | | | EXAMINER DUONG, TAI V | |
| | | | ART UNIT 2871 | PAPER NUMBER |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/09/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/696,440 | PARK ET AL. | |
| | Examiner Tai Duong | Art Unit 2871 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 13 December 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 11-26 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 11-25 is/are rejected.
 7) Claim(s) 26 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 28 October 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

The objection to the drawings and the rejection of claims 11-17 and 19-26 under 35 U.S.C. 112 have been withdrawn in view of the amendments to the claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 is *inconsistent* with the specification and the drawings. The specification and Fig.3 disclose the first and second prism sheets 45b are *above* the light-diffusion plate 45a (the light-scattering means), not *below* as recited in the claim. In the below rejections over the prior art, it is *assumed* that claim18 is consistent with the specification and the drawings. That is, the first and second prism sheets 45b are *above* the light-diffusion plate 45a (the light-scattering means).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11, 17, 18, 20 and 22-24 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kameyama et al (US 6,339,501).

Note Figs. 3 and 4 which identically disclose the claimed liquid crystal display (LCD) device comprising a liquid crystal layer between the lower and upper substrates (the liquid crystal cell 5); a first polarizing plate 31 on the upper substrate; a second polarizing plate 1 below the lower substrate, the second polarizing plate having a light-diffusion layer 11 (col. 2, lines 12-14) on a surface thereof; a backlight unit (elements 6-9) below the second polarizing plate; first and second prism sheets (6a, 6b) being above a light-diffusion plate 7 (col. 2, lines 7-17; col. 8, line 22 – col. 10, line 26).

Claims 11, 17, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Iijima (US 6,124,905).

Note Figs. 4 and 5 which identically disclose the claimed liquid crystal display 10 device comprising a liquid crystal layer 26 between the lower substrate 22 and the upper substrate 21; a first polarizing plate 12 on the upper substrate 21; a second polarizing plate 40 below the lower substrate 22, the second polarizing plate 40 having a light-diffusion layer 30 on a surface thereof, wherein the light-diffusion layer 30 is disposed in contact with the second polarizing plate (col. 9, lines 59-61) and adjacent to a backlight unit 70; the backlight unit 70 being below the second polarizing plate, wherein the backlight unit comprises a light-scattering means 72 (col. 10, lines 26-27) and wherein no additional layers are disposed between the light –diffusion layer 30 and the backlight unit 70.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-20 and 22-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Related Art Figs. 1 and 2 (ARA Figs. 1 and 2) in view of Kameyama et al (US 6,339,501). Unless indicated otherwise by Applicant, the examiner assumes that the Related Art Figs. 1 and 2 are Prior Art, as mentioned on page 4 of the last Office Action.

The only difference between the LCD device of ARA Figs. 1 and 2 and that of the instant claims is a light-diffusion layer disposed in contact with the second polarizing plate 14b (the third passivation layer 28), the light-diffusion layer having a plurality of projections being formed on one surface thereof. Kameyama et al disclose in Figs. 3 and 4 a LCD device having a light-diffusion layer 11 disposed in contact with the second polarizing plate 1, and the light-diffusion layer having a plurality of projections 111 being formed on one surface thereof. Thus, it would have been obvious to a person of ordinary skill the art in view of Kameyama et al to employ in the LCD device of ARA Figs. 1 and 2 a light-diffusion layer disposed in contact with the second polarizing plate 14b (the third passivation layer 28) for obtaining a large area LCD device which is thin, excellent in luminance and excellent in display quality (Kameyama, col. 2, lines 14-16).

Also, it would have been obvious to a person of ordinary skill in the art to employ a total of Haze of the first polarizing plate and Haze of the second polarizing plate being at least about 40% for reducing backlight Mura phenomenon.

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 26 is allowed over the prior art of record. None of the prior art discloses or suggests a LCD device having a structure recited in claim 14 *in combination* with the feature "wherein the light-diffusion layer produces an amount of Haze, and a density of the projections is less than a density of beads that would have to be added to one of the adhesive layers to obtain the same amount of Haze".

Response to Applicant's remarks

With respect to Applicant's remarks that the concave-convex structure 11 of Kameyama et al does *not* diffuse light, Kameyama et al *do* disclose that the concave-convex structure has a function of diffusing light, as disclosed in lines 11-14 of column 2 "[M]oreover, the **diffusing** effect of the fine concave-convex structure can prevent interference fringes from occurring even in the case where the fine concave-convex structure is adjacent to the prism sheet".

Applicant's arguments filed 12/13/2006 have been fully considered but they are not persuasive for the above-mentioned reasons.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Duong whose telephone number is (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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03/07

TOAN TON
PRIMARY PATENT EXAMINER